

Stakeholder Feedback on a Slaughterhouse Hygiene Intervention in Western Kenya

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Introduction

The intervention implemented evaluated through the Improving Hygiene Practices in Slaughterhouses in Western Kenya study (Ambler, et al., 2024) aimed to address poor hygiene practices in slaughterhouses, which contribute to foodborne illnesses and unsafe meat. Conducted in 140 slaughterhouses across 6 counties in Western Kenya, the intervention focused on training workers, provision of basic hygiene equipment, and the use of monetary incentives to improve compliance with recommended hygiene practices. After the intervention period, key informant interviews (KIIs) were conducted with stakeholders including six County Directors of Veterinary Services (CDVSs), nine sub-county veterinary Officers (SCVOs), one Public Health Officer (PHO), and ten meat inspectors (MIs).

This report summarizes findings from the KIIs regarding perspectives on the intervention, sustainability, challenges with implementation, and provides a basis for recommendations on refining and scaling up or this approach.

Perceptions of the Intervention by Different Groups

The intervention was positively received by all groups involved, though their perspectives varied based on their roles and responsibilities.

CDVSs unanimously recognized the value of the intervention in addressing persistent hygiene challenges in slaughterhouses. They saw the structured training and monitoring as critical steps toward improving meat safety and expressed a willingness to adopt similar practices as part of routine operations if resources allowed.

SCVOs, who were directly involved in implementing the training, highlighted the program's practical nature and long-overdue focus on capacity building. Many noted that the intervention addressed an important knowledge gap among workers, which enabled them to understand the rationale behind hygiene protocols.

The MIs appreciated the intervention for improving hygiene in slaughterhouses. Over 90% noted significant changes in hygiene practices, such as workers washing hands, cleaning equipment, and adhering to personal protective equipment (PPE) use. Training was widely recognized as critical, with MIs emphasizing that it improved workers' understanding of safe practices. However, about 30% raised concerns about sustainability, particularly when resources like soap and cleaning tools were not consistently available after the intervention.

SCVOs reported that other stakeholders, such as facility managers, butchers and local administrators were generally receptive to the training. About 80% of these attendees provided positive feedback, appreciating the practical aspects of the training. However, a few of managers expressed concern about the cost of maintaining hygiene standards long-term without ongoing external support.

What Participants Liked About the Intervention

The training component emerged as a highlight for many participants. SCVOs said workers liked the use of visual aids, such as posters and demonstrations, which made the concepts easy to understand. They especially appreciated that the training was practical and addressed the daily tasks at slaughterhouses directly. The availability of training material in Swahili and vernacular translations ensured inclusivity, allowing workers with varying literacy levels to follow along with the training.

The provision of hygiene equipment was another widely appreciated aspect of the intervention. It was reported that workers expressed gratitude for the PPE provided, which most could otherwise not afford, handwashing stations, and cleaning supplies, which enabled them to apply the practices they had been taught. In many facilities, the introduction of the three-bucket cleaning system for knives and tools was well-embraced, helping in cleaning during slaughter operations.

For facilities that received incentives, these were a strong motivator for compliance. Workers in these facilities often encouraged each other to meet the standards set during training, with many noting that the monetary rewards were a much-needed boost to their incomes. However, the incentives were not always praised, as some stakeholders felt that they might not be sustainable in the long term. Some stakeholders felt that monetary incentives created dependency and reduced intrinsic motivation to maintain hygiene practices.

Slaughterhouse Workers' Reactions to the Intervention

SCVOs reported that most workers responded positively to the training. Workers were especially excited about receiving PPE (i.e. gumboots and aprons). Posters were well-received, the workers referencing them as reminders of the correct hygiene practices. Incentives also played a role in motivating workers, with many SCVOs reporting that the prospect of earning incentives helped increase adherence to hygiene standards.

MIs reported that workers initially showed resistance, with about 60% of MIs noting hesitation about the intervention. However, this changed as they became familiar with the practices and benefits. Provision

of PPE and weekly payments significantly motivated workers, with many MIs reporting positive feedback once workers understood the purpose of the intervention.

Workers in facilities that received incentives were particularly motivated. The prospect of earning weekly rewards encouraged adherence to hygiene protocols, even among those who had initially been reluctant. In non-incentivized facilities, motivation levels were more variable, and compliance often depended on the presence of meat inspectors to enforce standards.

Practices That Were Hard to Implement

Despite the training and resources provided, the practices workers found most challenging included:

- ▶ Proper carcass handling techniques during flaying (avoiding simultaneous contact with hides and meat to prevent cross-contamination) was identified as a challenge by over half of respondents.
- ▶ According to the SVCOs, most workers forgot to wash their hands after handling meat or using equipment, despite being trained to do so.
- ▶ Consistent washing of knives was difficult, with workers in most of the facilities struggling to maintain the recommended cleaning frequency.
- ▶ Some found scalding pigs on scrubbing tables hard to implement, with some citing physical discomfort and preferring to do it on the floor.
- ▶ Hoisting carcasses prior to skinning, due to the weight of the full animal.

These challenges were attributed to insufficient time to wash hands during busy periods, resistance to the additional effort required, and resource shortages. Facilities without access to potable water or proper carcass hoists found it nearly impossible to comply fully with the intervention's recommendations. High turnover rates were also identified as a significant barrier, as new workers often required retraining, which could be difficult to maintain.

Challenges Encountered During the Intervention

- ▶ According to SCVOs and MIs, workers prioritized speed and output during slaughter over compliance with hygiene practices. Some viewed training as a disruption and inconvenience to their workflow.
- ▶ Limited access to potable water hindered compliance. Around 50% of slaughterhouses faced issues with inadequate water infrastructure, cleaning supplies, or storage facilities, making consistent implementation of hygiene practices difficult.
- ▶ Dependence on external provision of hygiene materials posed a challenge. Facility owners were reluctant to invest in consumables such as soap and water treatment solution when those provided through the study were depleted.

Suggestions for Future Interventions

Stakeholders provided several recommendations to improve the effectiveness and sustainability of future interventions.

- ▶ Regular refresher training was a common suggestion, with SCVOs recommending quarterly or biannual sessions to address staff turnover and reinforce hygiene practices.
- ▶ Non-monetary incentives, such as certificates or public recognition for compliant facilities, were suggested as a sustainable alternative to monetary rewards.
- ▶ Investing in infrastructure, including potable water systems and proper waste disposal facilities, was identified as critical for long-term success.

County-level Adoption and Resource Needs

Counties expressed strong interest in adopting the intervention, with all CDVSs indicating a willingness to integrate training and monitoring into routine operations. However, they emphasized the need for external support to sustain training and equipment provision.

Key resource needs included funding for training materials, training logistics, additional personnel to handle monitoring in slaughter facilities and infrastructure improvements to address gaps in water access.

Perspectives on Decontaminating Meat

Most stakeholders were open to exploring alternative methods for decontaminating meat, such as spraying carcasses with food-safe chemicals. While the majority expressed a willingness to promote such methods if proven effective, some raised concerns about costs and consumer acceptance.

Conclusion

The intervention improved awareness and hygiene practices in slaughterhouses but highlighted persistent challenges in resource sustainability, infrastructure, and behavioral compliance. Counties demonstrated a strong willingness to adopt the intervention, provided the necessary resources are available. Future efforts should focus on reinforcing practices through policy integration, regular training, and infrastructure development to ensure long-term impact.

The hygiene intervention successfully demonstrated the potential for improved practices in slaughterhouses for safer meat production and better public health outcomes. However, long-term success requires addressing systemic challenges, including resource sustainability, infrastructure gaps, and behavioral resistance. By integrating these practices into routine operations and policy frameworks, the intervention can serve as a model for broader adoption in Kenya and beyond.

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